

January 1, 2011 Water Supply Forecast Discussion

Here is DWR's January 1, 2011 Water Supply Index (WSI) forecast.

Forecast Summary:

A Water Year 2011 WSI forecast for conditions as of January 1, 2011 is posted at <http://cdec.water.ca.gov/cgi-progs/iodir/WSI.2011>. The accretions forecast will be sent at a later time. This WSI forecast is based on the precipitation and flows through December 2010 and can be summarized as follows:

Sacramento River Unimpaired Runoff Water Year Forecast	21.9 MAF
(50 percent exceedence)	(118 percent of average)
Sacramento Valley Index (SVI)	9.2
(50 percent exceedence)	(above normal)
San Joaquin Valley Index (SJI)	3.9
(75 percent exceedence)	(wet)

Runoff:

Unimpaired flows have been running well above average, particularly after a very wet December. December's statewide runoff of 7.96 million acre-feet (maf) was 190 percent of average. At the end of December, statewide water year runoff was about 160 percent of average.

Precipitation:

After the first quarter of the water year, precipitation in the Sacramento River Region is at 174 percent of average, the San Joaquin River region is at 220 percent of average, and the Tulare Lake region is at 265 percent of average. Statewide, cumulative water year precipitation through December is around 202 percent of average.

The Northern Sierra 8-Station Precipitation Index gained 16.4 inches in December (195 percent of average) for a cumulative water year index of 31.9 inches (180 percent of average). For reference, on January 1, 2010, the 8-Station Index came in at 13.6 inches (77 percent of the seasonal average for the date).

The southern part of the state has been even wetter as the San Joaquin 5-Station Index received 17.3 inches of precipitation during December (279 percent of average), bringing the index to 31.7 inches (246 percent of the seasonal total to date). For reference, on January 1, 2010, the 5-Station Index came in at 13.7 inches (106 percent of the seasonal average for the date).

Snowpack:

According to the snow sensor network, the statewide snowpack increased from about 6.4 inches (22 percent of the April 1 average) of snow water equivalent to 21.6 inches (75 percent of the April 1 average) during December. As of January 1st, the pack stood at 209 percent of average for the date but has dropped to 182 percent as of today due to a dry start to January.

Weather and Climate Outlooks:

The latest weather forecasts indicate rain showers for the northern half of the state over the next few days, followed by another drying out period. Freezing levels are currently between 2,000 and 7,000 feet

for the majority of the Sierras. Those levels will increase during the week to above 12,000 feet by Friday.

The NWS Climate Prediction Center 30-day temperature outlook (issued December 31, 2010) calls for equal chances of above or below normal temperatures for all of California. The 30-day precipitation outlook issued the same day calls for increased chances of above normal precipitation for the southern half of California and equal chances of above or below normal precipitation for the northern half of the state.

The 90-day seasonal temperature outlook valid for January thru March, 2011 (issued December 16, 2010) calls for increased chances of below normal temperatures across all of Northern and Coastal California as well as the San Joaquin Valley. The same outlook calls for increased chances of above normal temperatures in Southeastern California while the remaining areas of California including the Southern Sierra Nevada and the Owens River Valley have equal chances of above or below normal temperatures. The 90-day seasonal precipitation outlook issued the same day calls for increased chances of above normal precipitation along the California-Oregon border and equal chances of above or below normal precipitation for the rest of Northern and Central California. The same outlook calls for increased chances of below normal precipitation for the southern half of the state including the Southern Sierra Nevada and the Tulare Lake Region.

Next Forecast:

The next forecasts produced will include the next water year WSI and the first Bulletin 120 of 2011. Both products will be for conditions on February 1, 2011 and should be available on or around Tuesday, February 8, 2010. If you have any questions regarding this forecast, please contact a member of the Snow Surveys staff.

We wish you a wonderful 2011!!

Snow Surveys Staff Contact Information:

Dave Rizzardo, Chief	(daver@water.ca.gov)	916-574-2983
John King	(kingjj@water.ca.gov)	916-574-2637
Steve Nemeth	(nemeth@water.ca.gov)	916-574-2634
Andy Reising	(areising@water.ca.gov)	916-574-2181

Important Links:

Full Natural Flow Data:

Daily FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FNF

Monthly FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FNFSUM

Seasonal FNF

http://cdec.water.ca.gov/cgi-progs/snowsurvey_ro/FLOWOUT

Precipitation Data:

Latest Northern Sierra 8-Station Precipitation Index

<http://cdec.water.ca.gov/cgi-progs/queryDaily?s=8SI&d=today>

Latest San Joaquin 5-Station Precipitation Index

<http://cdec.water.ca.gov/cgi-progs/queryDaily?s=5SI&d=today>

Snow Data:

Latest Snow Sensor Report

<http://cdec.water.ca.gov/cgi-progs/snow/PAGE6>

Latest Statewide Summary of Snow Water Equivalents

<http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ>

Monthly Snow Course Report

<http://cdec.water.ca.gov/cgi-progs/snow/COURSES>

Extended Regional Forecasts:

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php>

Climate Prediction Center One-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/30day/>

Climate Prediction Center Three-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/90day/>

U.S. Seasonal Drought Outlook

http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html

Weather Forecast Office California Service Area-Products

<http://www.cnrfc.noaa.gov/forecasts.php>